place, the City will prepare separate Section 4(f) evaluations for such resources.

None of the Section 4(f) properties along the project alignment are wildlife or waterfowl refuges and, therefore, uses due to ecological intrusion are not applicable. The Project's design will not restrict access to any Section 4(f) property.

The following sections describe use of Section 4(f) properties. An assessment has been made as to whether any permanent or temporary occupancy of a property will occur and whether the proximity of the Project will cause any access disruption, noise, vibration, or aesthetic impacts that will substantially impair the features or attributes that qualify the property for protection under Section 4(f).

# 5.5 Direct Use of Section 4(f) Properties

Sections 5.5.1 and 5.5.2 describe the Section 4(f) properties that will have direct uses as a result of the Project. Properties having *de minimis* impacts are noted in these sections as well. The discussion of those properties found to have a direct use, which is not a *de minimis* impact, includes discussion of avoidance alternatives and measures to minimize harm.

### 5.5.1 Park and Recreational Properties

As described in Section 4.5, 11 public park and recreational properties are adjacent to the Project. Table 5-1 lists these publicly owned parks and their Section 4(f) use. The Project will require property acquisition at Ke'ehi Lagoon Beach Park and Aloha Stadium, which will result in a *de minimis* impact at these Section 4(f) properties. The Project will also require temporary occupancy at the future Middle Loch Park and Pearl Harbor Bike Path to construct an underground stormwater outfall drainage pipe (Section 5.7).

In most cases, the alignment runs within or near major highways and thoroughfares. Since substantial elements of urban development already exist, the Project will not impair or diminish the activities, features, or attributes that qualify properties in these areas for protection under Section 4(f). Potential proximity-related use is discussed in Section 5.6, Evaluation of Constructive Use of Section 4(f) Properties.

# Aloha Stadium (De minimis Impact) Description and Significance of Property

Aloha Stadium is bordered by Salt Lake Boulevard, the H-1 Freeway, Kamehameha Highway, and Moanalua Road (Figures 5-5 and 5-6). The 50,000-seat stadium is situated on 99 acres, most of which are used for event parking. It is owned by the State but is under the jurisdiction of the Department of Accounting and General Services (DAGS). Land use for the Aloha Stadium property is designated as a General Preservation District (P2) under the City's land use ordinance. Aloha Stadium is primarily used for athletic competitions, such as the Hula Bowl, Aloha Bowl, Pro Bowl, and University of Hawai'i football games. Other recreational uses include hosting various concerts and family-oriented fairs.



Figure 5-5 Aloha Stadium, looking from Associated Parking Lot

#### Section 4(f) Evaluation

The use of Aloha Stadium involves construction of an elevated guideway through a portion of its parking lot along the 'Ewa edge of the property for

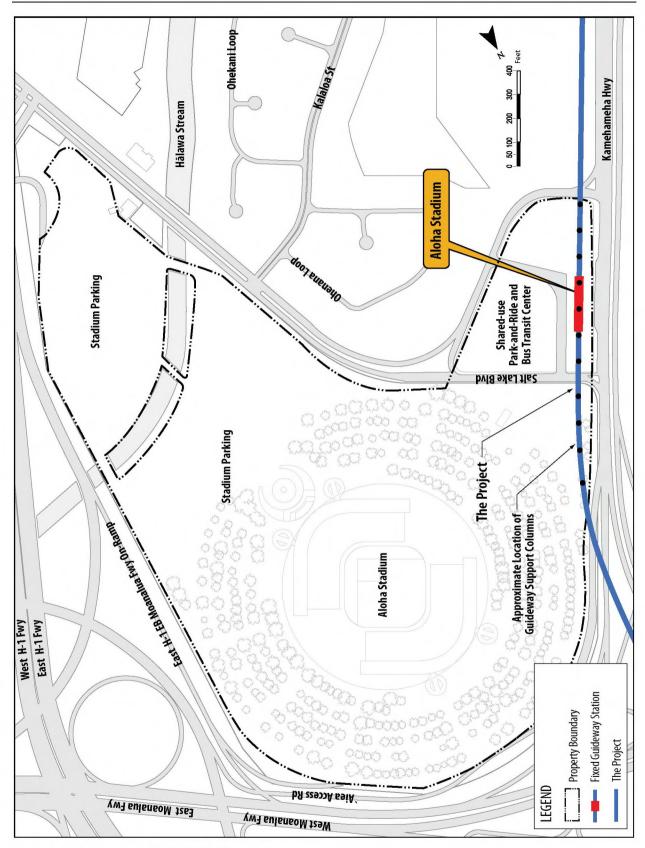


Figure 5-6 Aloha Stadium—Project and Features

a rail transit station and bus transit center, as well as a paved and striped shared-use parking lot. The elevated guideway will be about 28 to 30 feet wide and supported by columns that are about 6 to 8 feet in diameter, placed about 120 feet apart.

The base of each of the columns will use approximately 100 square feet. The guideway will carry electrically powered trains and will be about 35 to 40 feet aboveground through this area. The total amount of area that will be used by the Project is approximately 2 acres. This amount includes land under the guideway that may continue to be used for parking. The area for the shared park-and-ride lot will be an additional use of approximately 4.2 acres (Figure 5-6).

The elevated guideway will pass over a small portion of the main parking lot next to Kamehameha Highway. Approximately four columns will be placed in the main parking lot to support the guideway, requiring removal of approximately four parking spaces. The guideway will cross over Salt Lake Boulevard at Kamehameha Highway, continuing above the existing gravel overflow parking lot, supported by six columns. In the overflow lot, the City will construct a rail station and bus transit center to serve the stadium and will pave and stripe the gravel lot creating about 600 parking spaces that also will be used by patrons during stadium events. Approximately six guideway support columns will be located on Aloha Stadium property south of the overflow parking lot next to Kamehameha Highway. The guideway in this area will be wider than 30 feet to accommodate a third track for additional trains during stadium events. Because the Project will permanently incorporate land from the Aloha Stadium parcel into a transportation facility, this will be a direct use.

The Project will provide transportation benefits to Aloha Stadium that will enhance its ability to provide recreational opportunities to users, offering a choice of transportation modes, greater capacity, and improved service. The use of the site will not change with the Project. However, it will provide an additional form of access to Aloha Stadium via the new fixed guideway. The operation of the Project will not interfere with the features, attributes, or activities of the property. Therefore, the Project will have a *de minimis* impact as defined in 23 CFR 774.17. DAGS, the agency with jurisdiction over Aloha Stadium, has concurred with the *de minimis* impact finding (Appendix F).

#### Measures to Minimize Harm

The direct use of the Aloha Stadium property will be due to the guideway, station, bus transit center, and support columns within the stadium parking lots. The support columns have been designed to minimize the use of the property and maintain safety and access to the parking lots. The Project will provide additional access to events at Aloha Stadium. Measures to minimize harm were considered in the Project's design in coordination with DAGS. To minimize the Project's use of the stadium property, the guideway and supporting columns were designed to be as close to Kamehameha Highway as possible and still be consistent with operational and engineering constraints.

During Final Design, RTD will coordinate with DAGS regarding the design of the guideway, station, bus transit center, and the two parking lots. Access to the main parking lots will be maintained during construction in accordance with the Project's maintenance of traffic and safety plans developed in coordination with DAGS. There will be areas closed to the public temporarily during construction, primarily in the overflow parking area. The City will coordinate with DAGS to minimize construction during major events as practicable. If major events occur during construction, RTD will temporarily provide additional bus service and/or shuttle bus service to the stadium from existing City transit centers or parking lots. After construction, the main parking lot will be

restored and a new shared-use paved parking lot will be created.

### Agency Coordination and Consultation

The Aloha Stadium Authority, Aloha Stadium Manager, and Department of Accounting and General Services have participated in the planning of the alignment, the station location, and the park-and-ride lot within the boundaries of Aloha Stadium. Coordination included meetings on March 14, March 25, and October 20, 2008, and February 24, May 1, and May 15, 2009, as well as telephone discussions about the Project in January and February 2010. Coordination will continue during Final Design and construction to ensure that the Project will result in a net benefit, in terms of both enhanced access and parking.

## Ke`ehi Lagoon Beach Park (De minimis Impact) Description and Significance of Property

Ke'ehi Lagoon Beach Park is an approximately 70-acre community park at Lagoon Drive and UALENA Street (Figures 5-7 and 5-8). It is bounded on the makai side by Ke'ehi Lagoon and on the mauka side by mixed industrial developments and Nimitz Highway, which at that point is on a viaduct 10 feet above the park just outside its mauka border. The park is in the Koko Head direction of Lagoon Drive and in the 'Ewa direction of the Disabled American Veterans Ke'ehi Lagoon Memorial. It is operated and maintained by the DPR. There are two parking areas—the smaller one (53 spaces) is near the lagoon, and the larger one (421 spaces) is adjacent to the park's access road near the mauka border of the park. The recreational use of the park is primarily for daytime activity, with limited use of four lighted tennis courts in the evening.

Recreational amenities include 12 tennis courts, 1 baseball diamond, an open field, a paved walking path, picnic areas, a pavilion, and access to the water. Cultural events are held in the picnic area and the field. The baseball diamond is makai of





Figure 5-7 Ke`ehi Lagoon Beach Park

the Project and mauka of Ke'ehi Lagoon. Eight of the tennis courts are near Lagoon Drive and the entrance of the park, while the other four mauka courts are near Nimitz Highway. The four mauka courts near Nimitz Highway are the only courts with lighting to facilitate nighttime use. The open field is makai of the access road. Primarily local residents use the field for cricket, soccer, and softball practice and games, as well as other team and individual sports. Canoe clubs engage in active practice sessions and events at the park, including the State Canoe Regatta. The water is calm and the current is gentle, but it is not a swimming beach; the beach area is primarily used for boating or outrigger canoes.

#### Section 4(f) Evaluation

All of the recreational features, attributes, and activities of the park, other than the four lighted mauka tennis courts, are located makai and away from the Project. The Project will traverse the park near its mauka property line, generally following